

**U.S. Census Bureau**  
**Demographic Analysis Estimates Webinar**  
**December 1, 2010**

**TRANSCRIPT**

MICHAEL COOK: This is Michael Cook with the Public Information Office at the U.S. Census Bureau. I'd like to thank you for joining us today for our webinar on 2010 Demographic Analysis Estimates. We're happy to have with us today Mr. Jason Devine the Chief of the Methodology Research and Development branch here at the population division. I'd like to say that Jason will be giving you a presentation and afterwards we ask that you hold your questions for a Q and A following the presentation. Without further ado I will turn it over to Jason.

JASON DEVINE: Good afternoon, thank you for taking your time to join us for our webinar, hold on just one second here while we have the presentation brought up. This webinar is being held to let the media know what to expect at its December 6, Demographic Analysis news conference and technical meeting. Again I'm Jason Devine; I work in the Population Division of the U. S. Census Bureau.

For a little more than a year now I've been working with the team of demographers to produce five series of demographic analysis estimates for comparison with the 2010 Census count. As excited as we are about these estimates I want to say again these estimates are not the 2010 Census counts. I also want to say up front that we're not releasing the DA estimates during this webinar. I'll be releasing the DA estimates at the meeting on December 6.

Let me start by describing what demographic analysis is. Demographic analysis is a term used to refer to a set of methods that historically have been used to develop estimates of the population for comparison with decennial census count. DA estimates are developed in historical vital statistics. Estimates of international migration and other data sources that are essentially independent of the census. These estimates are then compared to census counts in differences by age, sex and limited race groups are examined.

As you will see later in this webinar the DA estimates have been a major source of information about each census and have documented the historical improvements that have occurred in each census. At the heart of the DA methodology is a basic demographic equation. At any point in time or for any area, the population or "P" equals the births or "B" that have occurred minus deaths, "D", with immigration added in, "I", and emigration "E" subtracted out. So this is really easy to understand if someone was here on April 1, 2010 they were either born here or migrated here and if you know these four basic components you know the size of the population, so again

I'll just go through that equation again. The population equals births, minus deaths, plus immigration, minus emigration.

This seems very straight forward, right, well it gets a little more complex but not much. DA estimates are developed using two methods, one for the population under 65, one for the population 65 and over. For the population under 65 a demographic accounting equation is used. The formula again is the population equals births, minus deaths, plus immigration minus emigration. It's also important to recognize that for the population under 65 births are by far the largest component of the DA estimate.

After DA in 2000 there were an estimate of 247 million people under the age of 65 and 235 million births have been recorded since 1935. But for the population 65 and over we use a different methodology. We are fortunate to have a very good administrative data set and Medicare enrollment database. This file includes records for everyone who is enrolled in Medicare. By combining the number of those enrolled with estimates of the proportion of the population not enrolled in Medicare developed from another Census Bureau survey, the Current Population Survey, we were able to obtain an estimate of the total population age 65 and over.

For the next few slides we're going to provide a very high level overview of key data input with the components of the DA estimates. This will be very high level so if you're interested in more detail I would encourage you to stay for the technical meeting following the DA conference on December 6.

I'll start with the vital statistics component. This includes historical bio-statistical data from the National Center for Health Statistics. We start with births that occurred in 1945, or births for the cohort that would include 64 year olds in April 1, 2010. We start with 1945 because as I said we have the Medicare base estimates for the population of 65 years old and older. And we know that not all births were registered in the earlier years, a lot of the births occurred outside of hospitals and a larger number of these births were not recorded to NCHS than those that occurred in hospitals. To account for this we have estimates of birth registrations completeness based on birth registration tests.

There have been three birth registration tests; there was one in 1940, one in 1950 and one in 1969 that included births occurring from 1964 to 1968. This allows us to obtain estimate of how many people were born in the United States, so if you think back to our demographic accounting equation people also die and again we use data from the National Center for Health Statistics, subtract deaths from each birth cohort for each age group. Here is one of the benefits of having the Medicare enrollment data, most deaths occur after the age of 65 and with exception of infant deaths prior to 1960 we assume death registration has been complete since 1945.

Now our accounting equation also includes international migration. For DA in 2010, estimates of international migration between April 1, 2000 and April 1, 2010, were developed from the American Community Survey questions on residence one year ago and year of entry. We

developed two sets of estimates for international migration. Here are the two ACS questions – Where did this person live 1 year ago? And also, when did this person come to live in the United States? Now for the international migration component, our DA estimates start with the 2000 DA estimates, which include historical estimates of international migration.

And finally, for the population 65 and over, we used Medicare based estimates developed from the number enrolled in the Medicare enrollment database and the estimate of those not enrolled from the Current Population Estimate.

Another basic methodology - now let me describe why historically we have only produced estimates by black and nonblack. There are two primary reasons why the DA have been limited to the black and nonblack race categories. Information on race in the current Office of Management and Budget race categories is not available for all years and all states in the historical vital statistics data. Historically, data on white and black was available in the vital records but we notice the reporting of race for the black population birth is fairly reliable. Whereas for the other race categories, such as American Indian Alaska Native, Asian, Native Hawaiian, and Other Pacific Islander has not been so complete. Also, 2010 Census will include the option of selecting more than one race. Historical vital statistics do not include this option. The uncertainty this introduces in the classification of births by race limits the usefulness of DA estimates for race categories other than black and white.

Despite these limitations, DA has provided a historical record of the improvements of the census coverage that have occurred since 1950. A lot of what we know about patterns of census coverage comes from the examination of the differences between the DA estimates and census counts. This table shows the historical differences between DA estimates and census counts by black and nonblack categories starting with 1940.

Let's take a few seconds, a few minutes to look through this table. What we are showing on the left is the DA estimate, the census count, the difference and the percent difference and across the top you have each year, each decade. I want you to focus on the column labeled, percent difference and you can see if I walk you across the table starting with 1940, how the difference has decreased from 5.4 to 4 to 3 to 2.7 to 1.2 to 1.6 and then down below 1. This is for the total population. You can also look at the black population and nonblack population in the rows below. This shows the DA estimates and how you can compare the DA estimates and get a difference between a DA estimate and the census count and how this is documented these historical improvements in census coverage starting with 1940.

The DA has a long history as a source for comparison with the census count. This decade we're continuing this tradition and have made enhancements to the program, there were several areas that we focused on for DA in 2010. We tried to increase our collaboration with external experts. We're also releasing the DA estimates prior to the release of the 2010 census counts on December 6. We've conducted a component based sensitivity analysis in a range...that produced

a range of DA estimates. We've used alternative approaches for assigning race to the birth records in the DA estimates. We're using data from the American Community Survey to estimate international migration. We're also for the first time producing estimates by Hispanic origin, but only for ages under 20, just like for the estimates by black and non-black, we are limiting the estimates to under 20, because of the limitation of historical birth data. It wasn't until 1990 that all but two states collected this information on their birth records.

We're holding the December 6 news conference and technical workshop to further our efforts to collaborate with external experts and to release the DA estimates prior to the census 2010 counts to be as transparent as possible. So I'm going to just go over the basics for the conference. Again it will be held on December 6, we'll start at 10 a.m., it will be held at the George Washington University at the Elliott School of International Affairs. This is in Washington, D.C. Robert Groves, Director of the U.S. Census Bureau will be presenting. I'll be presenting the DA estimates and we'll have demographers external to the U.S. Census Bureau who will be available for your questions.

What should you expect on December 6? On December 6, the Census Bureau will host a group of academics, external researchers and federal employees to discuss the 2010 Demographic Analysis estimates. All of the participants are knowledgeable about demographic analysis techniques and the data used to develop demographic analysis estimates. Five series of DA population estimates will be released that will form the foundation for an initial demographically based assessment of the quality of the 2010 Census national count. The range of estimates is being provided to clearly communicate the uncertainty around the estimates. The day will include both a DA news conference and a technical DA meeting. Members of the press are invited to stay for the technical meeting and participants in the technical meeting will be present for the media event.

What will be released on December 6, five series of DA population estimates by single year of age, sex and race for the black and non-black categories, five series of DA populations estimates by single year of age, sex and Hispanic origins for ages under 20, the description of how each series of estimates was developed and the individual components of each series of estimates, births, deaths, international migration and Medicare enrollment.

We realize that by releasing five series of estimates it doesn't make your job any easier but we arrived at this decision to release multiple estimates based on the input of demographers external to the Census Bureau and believed it was the best way to communicate what can best be described as uncertainty around the DA estimates. For 2010 DA we are providing five series of estimates because it allows us the first varying only assumptions about the estimates of international migration to the low and high middle series and then they will include additional assumptions about international migration and the other components that produce two outer series of estimates.

We will consider each of these estimates that we release to be plausible. Uncertainty will vary across each of the DA estimates by single year of age, sex and race, black and non-black and Hispanic origin under age 20 and we'll show this on December 6. And again the five series of DA estimates were developed to more communicate the uncertainty in the DA estimates. Just as with the past DA estimates that have been so important for helping us develop an understanding of each census by examining that patterns and the differences between the census counts and the DA estimates it effectively targets specific groups each census. The five series of DA estimates that we will be releasing on December 6th will form the basis for these comparisons with the 2010 census.

This brings us to the end of our webinar, I hope you found it informative, before we take questions let me summarize what I've discussed today. The DA event on December 6 will include both a news conference and a technical DA meeting, five series of DA population estimates by age, sex, race, the black and non-black categories and five series by Hispanic origin under age 20 will be released. And just as a reminder DA has three major components, vital statistics which includes birth and death, international migration and the Medicare enrollment data. And again five series DA estimates will be provided on December to more clearly communicate the uncertainty in the DA estimates. We have one additional slide with contact information.

MICHAEL COOK: Thank you Jason. Operator we're ready for questions and answers of reporters. Is there anyone on the line?

OPERATOR: Oh, yes, if you would like to ask a question please press star then 1. You will be announced by name and organization, one moment please. Carol Morello your line is open with Washington Post.

CAROL MORELLO – WASHINGTON POST: Thank you, can you tell us how accurate this information you're releasing on Monday will be in being a preview for the state by state population breakdowns that will be released later in the month from the actual census?

JASON DEVINE: Well, if I understand your question correctly I must first point out that these estimates national level and will be providing a range of estimates and we're not discussing that range today, that will be available and be apparent from the five series of estimates that we produce. We're also at this point not aware of at least the team has been working on the demographic analysis estimate is not aware of what the census count is, we've been kept separate

from the operation and we focused mainly on producing the demographic analysis estimates. Once the census counts are released, then we will start the process of making those comparisons between the DA estimates and the census count.

[ Pause ]

OPERATOR: Thank you our next request Tim Homan of Bloomberg News your line's open.

TIMOTHY HOMAN: Yes, I was curious to know how you'll be distributing the information on Monday, will it be on your census website immediately at 10 a.m. and will there be you know physical handouts at the media briefing or will this be provided under embargo before the 10 a.m. briefing?

MICHAEL COOK: Yes, we will have handouts of all of the information provided at the press conference at GW as well as an electronic press kit on our 2010 site that will have all the information there for the people who cannot attend in person.

TIMOTHY HOMAN: And the electronic press kit will be posted on line at 10 a.m., is that correct?

MICHAEL COOK: Correct actually that electronic press kit it is going to be going up probably today and you'll be able to see a taped version of the webinar that's taking place today but then once we actually start and convene the press conference, the press conference The Presser on Monday we will put that information up.

TIMOTHY HOMAN: Thank you.

OPERATOR: Our next request from Hope Yen, Associated Press, your line is open.

HOPE YEN: Yes, hi, I was wondering if you could provide a little more detail today on what are some of the different assumptions that are behind the five sets of numbers being released, you know you mentioned high and low migration, and I guess I'm wondering also if there...if there's any one scenario among those five sets that was the basis for the initial DA number that was put out for the 2000 census?

JASON DEVINE: We are producing five series of estimates, we will vary assumptions with each component of these estimates, let me talk briefly about the international migration component. We're using two different methods for developing estimates for developing estimates of international migration, one based on the ACS year of entry question, one base on the ACS residence one year ago question. We're also including measures of statistical error in this estimate to produce a low series of international migration as well as a part of the assumptions about the different components of international migration, for example we are including different assumptions about our estimates of the native born migration. For the other components we're including different measures of enrollment in the Medicare enrollment data base and for the biostatistics data we're including different assumptions about the completeness of the birth registration, the historical birth registration. We're also revisited our base that we're building on for our estimates of international migration. We've looked at some of the assumptions that went into the DA estimates in 2000 and we varied some of those assumptions, we provided to the participants in the technical conference the paper that sort of goes through in detail all of the different alternatives we've included in our DA estimates, the alternatives that make up those five series of estimates, um and we can provide that on request.

HOPE YEN: Could I have a follow up?

MICHAEL COOK: Yes, go ahead.

HOPE YEN: Okay, so is there out of the five is there kind of one that's sort of the starting point and then the other four are kind of refinements of UL because when you put up, you put up a slide that compared previous census' with the DA estimates, I'm wondering which...it appeared to be a single number and so I'm wondering out of the five if there's one that's kind of the starting point and perhaps arguably the privileged one if you will with the other four being you know refinements and adjustments to it.

JASON DEVINE: Well, something to keep in mind about this historical estimates that we provided in that slide, they're all included multiple assumptions and they all underwent revisions after the census council released, for DA 2010 we're really just making those values including those assumptions in advance. We do consider all of the estimates we're producing plausible um, more directly to answer your question though we started with the same assumptions about birth registration completeness for the middle series of DA estimates, in other words the same factors

that were used to correct for the under registration of births in the 2000 DA estimates are included in the DA...the three DA middle series but then as I've described we've used different approaches for estimating international migration even within those middle series so we consider each of those three series as well as each of the five series equally plausible.

HOPE YEN: Okay, so the middle series as you mentioned is arguably kind of the starting point that and then you went off from there.

JASON DEVINE: With regard to the use of biostatistics, the birth data, yes.

HOPE YEN: Okay, all right, thank you.

OPERATOR: Our next request Tim Ermish, ASTU TV your line is open.

TIM ERMISH: Can you hear me?

MICHAEL COOK: We can hear you, Tim.

TIM ERMISH: We were just wondering here when the final census count will be released with all additional information on housing, unemployment, marriage, income levels, we don't have a date on that.

MICHAEL COOK: And the census bureau hasn't released the date on that as of yet. Um, but we can guarantee that before our congressional mandate of December 31, we will be releasing our apportionment data and then on flow basis starting in February 2011 we'll be releasing the redistricting data and the PL data.

We have on our website for those of you who aren't aware of the flow of the data from the 2010 census we have a document that we can get to at the end of this Q and A, I'm going to give you some contact information that we can send you from the public information office that will spell



out to you all of our data products at a glance and when they'll be released. And just to remind you that the data that is coming out is short form only. Anything else, Tim?

TIM ERMISH: No, that's it, thank you.

MICHAEL COOK: Thank you.

OPERATOR: Our next request from J.N. Sbranti, Modesto Bee, your line's open.

J.N. SBRANTI: Hi can you tell us how small of a geographic area you'll be releasing data for?

JASON DEVINE: Well, with regard to the demographic analysis we will be releasing estimates for the nation.

J.N. SBRANTI: Oh, just the nation, not...not even states?

JASON DEVINE: These are...yeah these will be national level estimates but they'll include detail by estimates by single year of age, um, sex and the DA race categories, those are the detail that allows the market [inaudible] and then start to look at the census counts by again single year of age and those categories, start to understand the differences.

J.N. SBRANTI: Okay, thank you.

OPERATOR: Our next request, Haya El Nasser, USA today. Your line is open.

HAYA EL NASSER: Yes, hi, Jason can you tell us or help us to understand why the census bureau decided to release the demographic analysis prior to the 2010 Census results?

JASON DEVINE: Well, I think our main motivation was transparency, we produced these estimates and they're used to using comparisons against the decennial census count and we wanted to provide them in advance to basically communicate the idea that we worked on these estimates independently, these are estimates developed by demographers at the census bureau with collaboration with demographers external to the census bureau, we're having the conference on December 6 with external demographers to basically come together and look at the data sources available that are outside of the decennial census to say what these other data sources and using the state of the art methodologies what does that tell us about the size of the U.S. population. As well as making these estimates available in advance it will make a really I think valuable, useful tool for data users and census planners to start to look at the census counts and to make sense of the differences when those counts become available.

HAYA EL NASSER: Okay, thank you.

OPERATOR: Our next request from Paul Monies, The Oklahoman, your line is open.

PAUL MONIES: Thank you I just...I think my question has already been answered about the...whether or not the state level data on the demographic analysis, I appreciate that.

OPERATOR: Thank you, next call.

OPERATOR: Carol Morello, Washington Post your line is open.

CAROL MORELLO – WASHINGTON POST: Hi, scratch me too, my question has been asked and answered since I punched in so sorry.

OPERATOR: Hope Yen, Associate Press your line is now open.

HOPE YEN: Yes, I was just trying to get a sense of...regarding the five sets of numbers do you...should we expect there to be high variability in the range of numbers and if so I'm wondering how useful comparison that could be with the final 2010 count if it's such a wide range and the 2010 number falls somewhere in that range, whether, you know, whether that will really offer any guidance in terms of accuracy and what not?

JASON DEVINE: Well, we believe the range is useful and we believe if is small enough where it does provide a useful tool to compare against the census counts and we do consider all the estimates be plausible which if you could imagine if you're looking at them in terms of demographic measures that the range is only going to be so large because as the range gets larger and starts to become demographically implausible so we believe our range is narrow enough to be useful and I think as we bring external demographers in on December 6, they'll agree with the range that we've developed, that it is an accurate basically assessment of what we know and really the value of the DA estimates and the comparisons lies in the patterns that we see and the differences between the DA estimates and the census counts. Then we're looking at not necessarily the levels, but the patterns by age and by sex in the DA estimates compared to the census counts to try and make sense out of the 2010 census counts.

HOPE YEN: Is it fair to say that the ideal would be that the 2010 count number will fall within that range and if it doesn't then it's something that will be closely looked at as to why?

JASON DEVINE: If the decennial census count falls outside of that range we won't know what it means until we conduct a careful analysis of the differences. Um, because the DA estimates are released by age and sex we expect to see differences by sex and age where we expect to see ages where the census counts do fall outside of that range, it will be the patterns of differences, again that will [inaudible] inform us about the 2010 census.

HOPE YEN: Okay, thanks.

OPERATOR: Thank you our next request, Chad Day, The Arkansas Democrat Gazette your line is open.

CHAD DAY: Yeah, I've just got a quick question, how do you express that reliability when you start looking at these 2010 census numbers and when will you release that as far as and how will that be expressed?

JASON DEVINE: Well, I'll let the representative from PIO respond to that, I assume you're asking about the decennial census counts, right, not the demographic analysis estimate?

CHAD DAY: Well, I'm talking about when you're judging reliability of those decennial census accounts compared to these DA numbers, how will express that and when you start to look at this when can we expect to see something that would be, as far as judging the reliability of that?

JASON DEVINE: Well, we'll be making the DA estimates by single year of age available to basically external researchers start to as soon as the census counts become available, to look at those differences and start to try to come to understanding of those differences themselves. But also keep in mind in 2012 results from the post enumeration survey which will provide additional detail, lower levels of geography and for additional demographic groups will be available and they will provide additional information and an estimate of the coverage of the 2010 census.

CHAD DAY: Sounds good, that's all I need.

OPERATOR: Thank you very much, our next from Adrianna Gomez, El Paso Times. Your line is open.

ADRIANNA GOMEZ: Hi, yes again I just want to clarify that they're not going to be any county, this is the county information even though the American Community Survey usually analyzes county by county and sometimes school districts, why is that we're not going to have that in this demographic analysis?

JASON DEVINE: Well, as part of our, we call the post-censal estimates program at the Census Bureau we do produce population estimates for all those levels of geography. As you can imagine, you're producing estimates for those lower levels of geography have to account for an

additional component that we don't include in our DA estimates which is internal migration and that just adds an additional level of uncertainty in our estimates and when you're looking for a value that we can compare in terms of an estimate that we can compare to a census count and start to begin to make assessments of the quality of the census, the error introduced basically through estimating internal migration is such that it makes it hard to interpret those differences, that's why we focus on limited DA estimates to the national level in these two race groups, non-Hispanic and non-Hispanic just because those are the levels that we can produce estimates that we're confident enough in that will make sense that will provide useful comparisons when you start to make those...so to conduct that analysis with the census counts.

ADRIANNA GOMEZ: Just a follow up question am I still on the line?

Yes. Just to follow up for the 2010 census will we see numbers international migration, domestic migration since I did not see those questions in the form?

MICHAEL COOK: No, we will not.

ADRIANNA GOMEZ: Okay thank you very much.

OPERATOR: Thank you, William Rufty, Ledger Newspaper, your line is now open.

WILLIAM RUFTY: Yes, earlier you opened up an issue which has one of my editors very anxious, you mentioned that the redistricting data would be available in February, will this be largely just the state data or will this go to smaller regions down to the county for state legislatures to begin their redistricting?

MICHAEL COOK: Exactly the latter.

WILLIAM RUFTY: Oh, great, that will calm him down, thanks very much.

MICHAEL COOK: Glad we could calm you down. Anything else?

OPERATOR: Our next is from Peter Francese, with the Advertising Age, your line is open.

PETER FRANCESE: Good afternoon gentlemen, um, a question on your website for a long time now there has been national level population projections and they were revised for 2009 and released of course with single years of age, etcetera and there were three different possible projections, three different projections there, will you be providing any advice or be able to advise us as to how these new 2010, these five 2010 estimates might mesh with the pro...the most recent projection series that you have produced?

JASON DEVINE: I also point out we have estimates of the population for April 1, 2010 available on our website but our advice at this point would be to use our demographic analysis estimates for any comparisons you're going to be making with the decennial census counts, um, these are the estimates that we've prepared simply for this purpose, they're developed essentially independent of the census and there's a lot of information that accompanies the estimates to help understand why there maybe differences between these estimates and the census counts, so these are the estimates and there's also information available in our population clock which actually reflects the date beyond the April 1, 2000 reflects the date today, the populating today, um but we would suggest, our advice would be to use these DA numbers when you're making those initial comparisons looking for numbers, looking for other sources to compare against the census counts.

PETER FRANCESE: If I could ask a follow up question, what I was trying to get at was you produce population projections out to 2015, 2020 by age, race Hispanic origin and so forth, will there be any advice or guidance from you on how these DA estimates might mesh with or alter how folks like ourselves could alter the population projections using these new DA estimates... my readers are interested in, you know, a forecast of what the population by age might be in 2015 or 2020 and how might these estimates inform that?

JASON DEVINE: Let us consider that question and keep in mind those estimates are based on the last census so they're going to be built and the projections are going to reflect the count from census 2000. When we developed the DA is to be independent from the census just for the purpose of comparison. But let us think about your question a little bit and discuss it internally to see what we could possibly provide along those lines.

PETER FRANCESE: Okay, I appreciate that. Thank you.

JASON DEVINE: Thank you.

OPERATOR: Our last question from Tim Homan, from Bloomberg News, your line is open now.

TIMOTHY HOMAN: Yes, hi for the five categories that you'll be release...having the DA estimates for on Monday, is there a 2009 point of comparison for all five of those categories?

JASON DEVINE: I'm not really clear on your question; the reference date for the estimates will be April 1, 2010. Now the way our demographic analysis process works is we do produce estimates for each year as we proof of estimates by what we refer to as cohortizing the population so we age the population forward each year, subtract that and add in [inaudible] international migration and immigration but we will not be releasing a times series of estimates that will cover the dates between 2000 to 2010.

TIMOTHY HOMAN: Okay, thank you.

MICHAEL COOK: Thank you that concludes today's webinar, I'd like to leave you with a little bit of information to remind everyone that the webinar and transcript will be archived and placed online by close of business Friday for those of you who did not get everything or hear everything, also once available we'll be sending out or resending the media advisory with that linked information as well as information concerning a webcast of Monday's demographic analysis news conference and technical conference taking place at George Washington University.

I'd like to encourage those that are within the DC metro area if you can come out to George Washington University, you have an opportunity to listen during the news conference and then after, during the technical conference and talk to an interview, Dr. Groves, Jason Devine will be there as well as top demographers from across the country and for more information you can

contact us here at the public information office by dialing 301 763-3691 or shoot us an e-mail to [pio.2010@census.gov](mailto:pio.2010@census.gov). Thank you everyone and this concludes our webinar for today.